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ANCIENT GLASS

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IN THE
FREER GALLERY OF ART

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Freer Gallery of Art
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FOREWORD

THIS BOOKLET was prepared by Dr. Richard Ettinghausen, our Head Curator of Near Eastern Art. He wishes to acknowledge the invaluable help of Mr. John D. Cooney, Curator of Egyptian Art at the Brooklyn Museum, for the identification and dating of the material from the New Kingdom and later Egyptian periods, and that of Dr. Cornelius C. Vermeule, III, Curator of Classical Art in the Museum of Fine Arts, Boston, who was good enough to provide valuable information about several pieces of Roman glass.

The very difficult task of photographing the various glass objects was successfully accomplished by Mr. Raymond A. Schwartz of the Freer Gallery of Art. For the lay-out of this publication, the Freer Gallery of Art is indebted to Mr. Frank Dobias of the Editorial and Publications Division of the Smithsonian Institution.

JOHN A. POPE,
Director.

Freer Gallery of Art
June 1962

IN A DESCRIPTION of a wedding feast in the *Maqamat*, or “Literary Seances,” the Arab author, al-Harîrî (died 1122) describes a glass dish as if it were “congealed of air, condensed of sunbeam motes, molded of the light of the open plain, or pealed from a white pearl.” These poetic metaphors aptly denote the special qualities of transparent, barely tinted glass, those which have appealed to people for the last 2,000 years. Yet when this medium was first discovered, it was the opaque, deeply colored glass which was used, and then primarily for beads or colored inserts such as the eye pupils of a Chinese gilt bronze dragon head in the Freer Gallery of Art (no. 32.14). In this early period of at least 1,500 years, it was the ability of making glass resemble semiprecious stones which was artistically exploited, and this inclination continued even after the technique of free-blowing was invented in about 50 B.C. Examples of this use of glass are not only the early Egyptian glass vessels but also small Roman busts made to resemble lapis lazuli, glass cameos which copied onyx or banded agate cameos, Islamic cut glass fashioned after rock crystal, and finally Chinese tongue amulets made after jade models.

The earliest preserved vessels are those of the XVIIIth Dynasty of Ancient Egypt. In spite of several earlier theories about the manner of their production, a feasible method of making them by mold casting in the manner of the “cire perdue” process has only recently been rediscovered experimentally by F. Schuler. The basic process came from metal casting but the additional steps of thread decorating and fire polishing represent new inventions which were derived from the special qualities of glass. The colored thread decorations were “dragged” up and down to form festoons or feathery decorations which were then rolled into the vessel. This type of ornamentation was later copied in Eastern Mediterranean regions and continued to be used in the Roman and Islamic periods, and it is, thus, often difficult to attribute a piece to a specific century or even period.

Roman fused mosaic glass is well represented in the Freer Gallery of Art. Here, long colored glass rods were combined under heat to form intricate patterns which were reduced to a smaller scale by pulling out

the “cane” agglomeration. These pieces are remarkable not only for the delicacy of their colorful designs revealing an unmatched technical dexterity but also as an index of the cultural development. Certain pieces still represent hieroglyphics, ancient gods, or their sacred animals. There are others which show new iconographic forms introduced by the Ptolemaic kings. Finally, such classical patterns as dramatic masks or a satyr adorned with grape leaves reveal the victory of the Hellenistic civilization.

The early Christian period is exemplified by two 6th-century altar cruets for wine and water. These are mold-blown and decorated with the simple but telling new symbolism of Christianity.

The Freer Gallery’s gilt and enameled pieces represent the most luxurious glass production of the Islamic world. Bewilderingly rich as their surface decoration is, they nevertheless reveal on closer scrutiny many handsomely executed motifs which show the high degree of draftsmanship of the 13th and 14th centuries. They represented the status symbol of royalty at the time, and so it is not surprising that the ambitious Rasûlid rulers of the Yemen had them specially manufactured for their court.

The limited amount of Chinese glass in the Freer collection may reflect the fact that the art of the glass worker never played a very important part in China. Glass was known there in pre-Han times, and while there is evidence that it was produced locally, we do not know if it was originally introduced from the West or developed independently on Chinese soil. It may be significant that the so-called eye-beads found in Late Chou sites are of Mediterranean type though they contain more lead, are heavier, and have a higher specific gravity than their Western counterparts. Since these beginnings, glass has been made continuously in China, but there is very little documentation, and the assignment of any given piece to the Han, T’ang, Sung, Yuan, or Ming dynasty is fraught with uncertainty. All datings used in this booklet follow those put forth by W. B. Honey and are extremely tentative.

* * *

An indication of the high degree of appreciation in which glass was held is a sentence in the Koran in which this medium is used in the symbolism of the Divine :

Allah is the Light of the heavens and the earth. The similitude of His light is as a niche wherein is a lamp. The lamp is in a glass. The glass is as it were a shining star. (XXIV, 35)

Thus, it was only natural that this sentence was used on the richly ornamented mosque lamps. The special esteem of glass is also revealed by the wide distribution of its fine examples. Sasanian glass from Persia is found in the Shosoin repository in Japan and a Syrian enameled bottle containing earth from Bethlehem drenched with the blood of the Innocent Children is kept in the Cathedral of St. Stephen's in Vienna, while other such pieces were discovered in China. Roman glass, too, had a wide distribution: painted glass from Cologne has been found in Denmark and Northumberland, and Alexandrian glass in Afghanistan.

Owing to its great physical and optical appeal and its fine decorations as well, glass has been an object of avid collecting in modern times. Among the pioneers was the late Charles Lang Freer who, in 1909, acquired from Giovanni Dattari 1,388 pieces of glass found in Egypt, thereby extending his collection to include another important medium of artistic activity. The majority of this purchase consisted of beads and fragments, but it, nevertheless, made his collection the second most important one of ancient Egyptian glass in the United States and a significant one for the Roman period. Toward the end of his life, Mr. Freer also acquired some important Chinese pieces, particularly animal figures of the Han and T'ang periods and Ch'ing vessels. After Mr. Freer had donated his treasures to the nation to be housed in Washington, the collection of glass was further enriched by some outstanding new acquisitions. Particularly important are the Islamic enameled vessels of the high Middle Ages acquired during the last 25 years.

Egyptian Glass Sculpture.

Fig. 1. Blue head from a composite relief inlay on a piece of furniture or shrine. Molded and cut. Ptolemaic, 300 B.C.—1st century B.C. H. 25mm. (x 3) (09.539)

Figs. 2 and 3. Beads in the form of a pair of ducks. Blue with white or with white and red stripes. Traditionally attributed to late Dynasty XVIII, but possibly Roman or later. 16 x 16mm. and 21 x 16.5mm. (x 2.5) (09.791 and 09.792)

Fig. 4. Deep-blue amphora with white, yellow, and light blue dragged thread design. H. 92mm. W. 54mm. (x 1.3). Egypt. New Kingdom, Second half of Dynasty XVIII. (09.421)

Fig. 5. Deep blue vase with white and yellow dragged thread design. H. 140mm. W. 65mm. (x 1.6). Egypt. New Kingdom. Second half of Dynasty XVIII. [\(09.415\)](#)

Fig. 6. Light-blue lentoid flask with dragged feather design in white, black, and yellow. H. 85mm. Egypt. New Kingdom. Second half of Dynasty XVIII. (09.416)

Fig. 7. Black pomegranate vase with yellow design. H. 102mm. Egypt. New Kingdom. Dynasty XVIII. Probably reign of Amenhotep III (1411-1375 B.C.) (09.423)

Core Vessels with Dragged Thread Decorations.

From left to right:

Fig. 8. Four-handled jar. H. 121mm. W. 52mm. (09.413)

Fig. 9. Amphora. H. 132mm. W. 93mm. (09.430)

Fig. 10. Kohl jar. H. 53mm. W. 37mm. (09.420)

Fig. 11. Lentoid flask. H. 80mm. W. 62mm. D. 48mm. (09.428)

Egypt. New Kingdom. Second half of Dynasty XVIII. (c. 1430-1340 B.C.)

Fig. 12. Dark blue vase with dragged design in yellow, white, and light blue. H. 69mm. (09.429)

Fig. 13. Deep purple apodal flask with three handles. White and yellow feather design. H. 167mm. (09.414)

Fig. 14. Black lentoid flask with dragged festoon design in yellow, white, and light blue. H. 92mm. (x 1.1) (09.431)

Fig. 15. Above: One-handled, dark-blue bottle with light blue, white, and yellow dragged design. H. 138mm. (x 1.2) (09.433)

Fig. 16. Right: Light-blue vase, originally one-handled, with black, white, and dark blue dragged design. H. 50mm. (x 1.4) (09.425)

Fig. 17. Left: Deep-purple flask, originally two-handled, with white, yellow, light blue, and black dragged design. H. 91mm. (x 1.1) (09.412)

Fig. 18. Left: Heart-amulet, dark blue with light blue and yellow dragged design. H. 22.8mm. (x 1.1) (09.524)

Fig. 19. Black knob with white and yellow inserts, from a chest or cabinet. D. 34mm. (09.886)

Fig. 20. Above: Apodal black flask with two green handles. Yellow, white, light blue, green, and black design. H. 54mm. (x 1.4) (09.424)

Fig. 21. Dark-blue bottle with white handles, yellow, white, and light blue dragged design. H. 35mm. (x 1.5) (09.418)

Egypt. New Kingdom. Second half of Dynasty XVIII. (c. 1430-1340 B.C.)

Egypt. New Kingdom. Second half of Dynasty XVIII. (c. 1430-1340 B.C.)

Kohl Flasks in the Shape of Columns with Palm Capitals.

Fig. 22. Royal blue body with yellow and white dragged design. H. 112mm. (x 1.3) (09.432)

Fig. 23. Dark purple body with yellow, white, and light blue dragged design. (x 1.3) H. 107mm. (09.436)

Fig. 24. Dark blue body with white and yellow dragged design. H. 87mm. (x 1.3) (09.419)

Fig. 25. Dark-blue jug with yellow and white dragged design. H. 77mm. About 500-300 B.C. (09.434)

Fig. 26. Dark-blue vessel with four loops. Yellow design. H. 45mm. Fourth-third century B.C. (09.426)

Fig. 27. White opaque oenochoe with purple design. H. 102mm. (09.332)

Fig. 28. Dark-blue alabastron with two lugs and yellow and white feather design. H. 129mm. Second half of third century B.C. (09.435)

Core Vessels.

Small Figured Objects from Eastern Mediterranean.

Fig. 29. Yellow head pendant with dark blue and white applied decoration. H. 23mm. Sixth century B.C. or later. (09.795)

Fig. 30. Dark-blue bead in form of ram with light-blue markings. Pierced lengthwise. H. 18mm. Possibly Egyptian. Second century B.C. (09.786)

Fig. 31. Pendant in form of black ram's head with white and yellow markings. H. 18mm. First century B.C. (09.785)

Fig. 32. Pendant of black ram's head with yellow and white markings. Pierced at bottom. H. 17mm. First century B.C. (09.526)

Ancient Egyptian Motifs

Fig. 38. Half of Capital with female head showing the insignia of the goddess Hathor. H. 30mm. (09.514)

Fig. 41. Cartouche with the title of Pharaoh ("Great House") twice repeated. 28 x 23mm. (09.502)

Fig. 43. Upper part of falcon, the sacred animal of the god Horus, the symbol of divine kingship. Probably of a royal titulary from an inlaid inscription on a naos. H. 18mm. (09.506)

Fig. 46. Figure of an ibis, the sacred animal of Thoth, the god of wisdom and science. 19 x 23mm. (08.66)

Fig. 47. Unidentified element, possibly lower part of a *djed*-column, symbol of the god Osiris, also hieroglyph for "endurance" or "stability." H. 46mm. (09.461)

Fig. 50. Ankh (Life) sign whose arms hold *was*-scepters with the head animal of the god Seth. W. 14mm. (09.441)

Fig. 53. Figure of a sacred bull (Apis?) on a pedestal with floral decoration. H. 27mm. W. 35mm. (09.530)

Figural Classical Motifs

Fig. 36. H. 36mm. (09.487) ; Fig. 37. H. 32mm. (09.488) ; Fig. 39. H. 31mm. (09.490) ; Fig. 40. H. 36mm. (09.489) ; Fig. 49. H. 23mm. (09.496)
Dramatic masks

Fig. 45. Half-face of a satyr decorated with leaves for a Bacchic rite. H. 30mm. (09.529 A)

Fig. 48. Spread eagle, regardant, as it appears on the reverse of the coins of Ptolemy II Philadelphus, Ptolemy IV Philopator, Ptolemy V Epiphanes, and Ptolemy VI Philometor (285-145 B.C.) W. 32mm. (09.483)

Fig. 51. Orientalized face, full view. H. 16mm. (09.511)

Decorative Motifs

Fig. 33. Capital form with volutes and crowning palmette. H. 11mm. (09.482)

Fig. 34. Series of borders; possibly part of collar, if so, here reproduced upside-down. 57 x 15mm. (09.460)

Fig. 35. Rosette. H. 10mm. (09.467)

Fig. 42. Vertical border design with palmettes and flowers, each unit set on volutes. L. 53mm. (09.443)

Fig. 44. Vertical border with split palmettes. L. 45mm. (09.445)

Fig. 52. Rosette composed of various elements. 23 x 23mm. (09.470)

Fig. 54. Flower composed of four heart-shaped leaves. 19 x 19mm. (09.469)

Fused Mosaic Plaques. Probably Egypt, About 1st Century B.C.—1st Century A.D.

Fig. 55. Ankh symbol, enlargement of Fig. 50 on color plate B. H. 15mm. W. 14mm. (x 4.4). Egypt, 1st century B.C. or later. (09.441)

Fig. 56. Dark blue double herma with similar, but less distinct molding on the back. Hole at bottom. H. 21mm. (x 3). Roman period, 5th to 6th century (?) (09.794)

Fig. 57. Gorgoneion or head of Eros. Molded in white over dark purple glass in imitation of cameo. H. 26mm. W. 22mm. (x 2.6). Roman, 1st or 2d century A.D. (09.684)

Fig. 58. Fused mosaic cane showing head of satyr. (See color plate B, Fig. 45) H. 30mm. W. 21mm. L. 64mm. (x 1.6). Probably Egypt, 1st century B.C.—1st century A.D. (09.529)

Fig. 59. High relief appliqué of a lion of brownish-red opaque glass with yellowish markings in imitation of marble. H. 36mm. W. 32mm. D. 32mm. (x 1.5). Egypt or Syria, Roman period, 1st to 2d century A.D. (09.885)

Fig. 60. Dark purple bead in form of a negro head. Roman period, Alexandrian type, 2d century A.D. H. 22mm. W. 10mm. (x 2.8) (09.796)

Fig. 61. Appliqué sculpture, probably posthumous portrait of Emperor Marcus Aurelius (161-180 A.D.). Dark-blue glass molded and cut in imitation of a lapis lazuli bust. H. 39mm. W. 32mm. (x 2.3). Roman period, late 2d to early 3d century A.D. (09.540)

Fig. 62. Figure of dolphin in clear yellowish glass. Dolphins were used as weights in the Black Sea area and elsewhere from the Hellenistic period on. Max. length 64mm. (x 1.2). Roman period, 1st or 2d century A.D. (09.855)

Fig. 63. Dark-blue figure of quadruped, possibly a boar. Over-all length 94mm. Roman period, 1st to 2d century A.D. (09.542)

Fig. 64. One of a pair of altar cruet-
ets (see fig. 66 on page 23) H.
162mm. Max. W. 94mm. (33.15)

Fig. 65. Fragment of medallion of purple-glass
paste, now covered with iridescence, with relief
scene in Byzantine style showing an enthroned
Madonna and Child with standing saints and an-
gels flying above. Illegible inscription. H. 59mm.
W. 38mm. Venice, about 1300. (10.24)

Fig. 66. One of a pair of altar cruets made of purple-colored, mold-blown glass now partly covered by iridescence. The decoration on the hexagonal bodies consists of the cross potent on steps, the cross potent on a globe, the leaved cross, and a lozenge-shaped figure in a rectangle, possibly standing for a bookbinding and therefore, symbolizing the Gospel. H. 157mm. Max. W. 101mm. Syria, 6th or 7th century A.D. (35.16)

Fig. 67. Upper left: Dark-purple vase with white dragged decoration, partly covered by iridescence. H. 82mm. D. 66mm. Roman period, 1st to 2d century A.D. (or later?). (09.417)

Fig. 68. Upper right: Flat black bottle with white, light blue, and green dragged decoration. H. 87mm. W. 43mm. Roman period, 1st or 2d century A.D. or later (?). (09.442)

Fig. 69. Second row left: Black chess figure of a pawn (Arabic: baydhaq) with white dragged decoration and blue "eye" within a white circle on top. H. 35mm. D. 29mm. Probably Egypt, Islamic period, 10th-12th century A.D. (09.779)

Fig. 70. Center: Black chess figure of a pawn with white dragged decoration. H. 24mm. D. 22mm. Probably Egypt, Islamic period, 10th-12th century A.D. (09.980)

Fig. 71. Right: Dark-purplish hollow figure, roughly of human shape with white dragged decoration. H. 49mm. W. 21mm. Eastern Mediterranean, Early Islamic period (8th-11th century). (09.852)

Fig. 72. Bottom: Black square with central hole decorated with white and red dragged wavy bands, possibly a weight, 43 x 43mm. Roman period, 1st to 2d century A.D. (?) (09.881)

Fig. 73. Beaker of gray-yellowish colored and fluted glass, gilded and enameled in red, yellow, white, light blue and green. H. 295mm. Max. D. 172mm. Syria, possibly Damascus, Bahri Mamlūk period, late 13th century. (48.14)

Fig. 77. Footed bowl with cover, of slightly yellowish glass, gilded and enameled with Near Eastern and Chinese motifs. H. 311mm. Max. D. 210mm. Syria, Bahri Mamlūk period, second quarter of the 14th century. (58.16) ►

▲ Figs. 74-76. Details of bowl with cover shown in color plate C. (58.16)

Fig. 78. Bowl of honey-colored glass, gilded and with blue, red, green, yellow, and white enameled decorations on the outside of the upper zone and on the inside in the lower parts, showing Near Eastern and Chinese motifs. As indicated by the

red, five-petaled rosette on white ground, apparently made for an anonymous Rastid Sultan of the Yemen. H. 210mm., Max. D. 350mm. Possibly Syria, about 1330-1340 A D (33.13)

Fig. 79. Inside view of deep bowl (33.13) shown in Fig. 78.

Figs. 80-82. Details of the bowl shown in Fig. 78. (33.13)

Figs. 83-85. Details of the bowl shown in Fig. 78. (33.13)

Fig. 86. High vase of greenish-yellow glass with two large and two small handles, gilded and enameled in blue, white, and red, also painted with a red pigment under the glass. As indicated by the red, five-petaled rosette on white ground apparently made for an anonymous Rasûlid Sultan of the Yemen. Found in China. H. 362mm. Max. D. 234mm. Syria, Bahri Mamlûk period, about 1370. (34.19)

Fig. 87. Bottle of gray-yellow colored glass, gilded and enameled in blue, red, white, green, and yellow. According to the Arabic inscription in thulth script, it was made for the Rasûlid Sultan, Malik Mujâhid Saif ad-Din 'Ali of the Yemen (A.D. 1321-1363) whose dynastic coat-of-arms, a red five-petaled rosette on white ground occurs six times. H. 497mm. Max. D. 248mm. Syria, Bahrî Mamlûk period, about 1350 A.D. (34,20)

Fig. 88. Mosque lamp of honey-colored glass, gilded and enameled in blue, red, white, green, and yellow. The decoration contains decorative plaited Kufic writing on the body, the first ten words of Sûrah 24, verse 35, of the Koran in thulth writing on the neck, and the epigraphic blazon of the

Bahri Mamlûk Sultan an-Nâsir Hasan (1347-1351 and 1354-1361) who possibly ordered it for his famous madrasa in Cairo built in 1356-1363. H. 338mm. Max. D. 305mm. Egypt, Cairo, Bahri Mamlûk period, second quarter of the 14th century. (57.19)

Figs. 89 and 90. Small bottle with figures of musicians, the designs gilded and enameled in green, red, white, and blue. H. 84mm. Max. W. 120mm. Depth 43mm. Syria or Persia, late 14th century (?) [\(29.8\)](#)

Fig. 91. Cicada of pale blue translucent glass with details incised. This tongue amulet, placed in the mouth of a corpse at burial, is a type commonly made of jade. L. 54mm. Han dynasty, 207 B.C.—A.D. 220. (16.621)

Fig. 92. Recumbent lion of clear glass with some areas of decomposition and a perforation in the front. L. 35mm. T'ang dynasty, A.D. 618-906, or later. (17.314)

Fig. 93. Recumbent horse of clear glass with a vertical brownish streak running the length of the animal; some areas of decomposition and a perforation under the neck. L. 44mm. T'ang dynasty, A.D. 618-906, or later. (17.644)

Fig. 94. Tall vase of clear glass with crizzled surface; flaring rim, high foot, vertical fluting. H. 355mm. Ch'ing dynasty, K'ang-hsi period, 1662-1722 (?) (15.116)

Figs. 95 and 96. Side and base views of shallow bowl with steep sides, dark blue glass with crizzled surface; indefinite radial fluting; coiled rope footring applied. D. 321mm. Ch'ing dynasty, K'ang-hsi period, 1662-1722 (?) (16.414)

Fig. 97. Bowl like Figs. 95 and 96, but smaller. D. 140mm. (16.347)

Fig. 98. Jar of green glass with crizzled surface; concave base. D. 147mm. Ch'ing dynasty, K'ang-hsi period, 1662-1722 (?) (46.29)

Fig. 99. Shallow bowl of clear glass with crizzled surface; diamond etched floral designs. D. 222mm. Ch'ing dynasty, K'ang-hsi period, 1662-1722 (?) (16.515)

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